of eggs, or at least ovoviviparity, would follow from the structure of the egg, since the abundance of yolk would do away with the necessity for a placenta. That the eggs had this Saurian characteristic was first definitely made known by Professor Poulton -[1] for *Ornithorhynclius,* and his results were confirmed later for *JZchidna.*[2] The structure of the eggs has., however, already been dealt with on p. 72. The fact that these animals lay eggs appears to have been known for a very long time, though rediscovered so lately as 1884 by Mr. Caldwell.[3] In connexion with the structure of the ova, the ovaries themselves and the oviducts are built upon the Sauropsidan plan. In the male the testes retain the primitive abdominal position. The fact that the urinary and genital products escape by means of their ducts into a chamber which also receives the end of the alimentary tract is not a distinctive feature of this group, inasmuch as it is seen in the Marsupials, and also in certain low Eutheria, such as the Beaver and other Rodents, and a few Insect ivores. As to external features, the Monotremata show certain archaic characters. The unspecialised arrangement of the mammary glands has already been described. These animals are plantigrade, if the term may be used also to describe the aquatic *Orn-ithorJiyneJius.* The ears are absolutely destitute of a conch. The remarkable spur upon the hind-legs furnished with a gland, which is more marked in the male, and indeed disappears in the female of *Ornitliorliynclius,* is a structure which argues the specialised condition of these two modern representatives of what must have been a large order in the past. The skeleton shows numerous ancient characteristics. In the skull there is no demarcation of the orbit from the temporal fossa, a feature widely found in archaic mammals. The tympanic remains as a slender ring, there being 110 auditory bulla formed either from, this or from any other bone. The mallexis and incus are large, and thus reminiscent of the quadrate and articular bone of reptiles. In the lower jaw the

absence of a marked coronoid process, and the absence of a firm ossification at the meeting of the two rami, may be a primitive state of

[1] ***Quart. Jbwrn. Micr. Sci.*** **xxiv. 1884, p. 124.**
[2] **Beddard, *Proc. JRoy, Phys. Soc. JEditib.* via. 1885, p. 354.**
[3] **See *Phil. Trans** clxxviil. 1887, where the literature of the subject is fully cited.**